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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|------------------|----------------------|---------------------|------------------|
| 09/807,287 | 04/11/2001 | Katsuhiko Hiramatsu | L9289.01129 6026 | |
| 7. | 590 • 07/27/2005 | | EXAM | INER |
| Stevens Davis Miller & Mosher Suite 850 | | | DAVIS, CYNTHIA L | |
| 1615 L Street NW | | | ART UNIT | PAPER NUMBER |
| Washington, D | C 20036 | | 2665 | |

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|---|---|--|--|--|--|
| Office Astion Comments | 09/807,287 | HIRAMATSU, KATSUHIKO | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Cynthia L Davis | 2665 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with th | e correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be y within the statutory minimum of thirty (30) vill apply and will expire SIX (6) MONTHS fr , cause the application to become ABANDO | e timely filed days will be considered timely. rom the mailing date of this communication. DNED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on 24 M | ay 2005. | | | | | |
| | action is non-final. | | | | | |
| , | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) ⊠ Claim(s) <u>9-16</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) ⊠ Claim(s) <u>10</u> is/are objected to. 8) □ Claim(s) are subject to restriction and/or | vn from consideration. | | | | | |
| Application Papers | | | | | | |
| 9) ☐ The specification is objected to by the Examiner 10) ☑ The drawing(s) filed on 24 May 2005 is/are: a) ☐ Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correction 11) ☐ The oath or declaration is objected to by the Ex | ☑ accepted or b)☐ objected t drawing(s) be held in abeyance. S ion is required if the drawing(s) is | See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d). | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of | s have been received. s have been received in Applic rity documents have been rece u (PCT Rule 17.2(a)). | eation No sived in this National Stage | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summ. Paper No(s)/Mai 5) Notice of Informa 6) Other: | | | | | |

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DETAILED ACTION

1. This application is in condition for allowance except for the following formal matters:

Claim Objections

2. Claim 10 is objected to because of the following informalities: "of claim 9" in line 1 of the claim should be changed to "of claim 9". Appropriate correction is required.

Allowable Subject Matter

3. The following is a statement of reasons for the indication of allowable subject matter: in independent claims 9 and 14, the limitation

"a channel estimation value synthesizer that synthesizes the first estimation value, a value obtained from the second estimation value by applying the phase rotation amount estimated in the phase rotation amount estimator to said second estimation value, and the third estimation value so as to calculate a definite channel estimation value"

is not found in the prior art.

4. The following is a statement of reasons for the indication of allowable subject matter: in independent claims 11 and 15, the limitation

"a channel estimation value synthesizer that synthesizes the first estimation value, a value obtained from the second estimation value by applying the amplitude coefficient and the phase rotation amount estimated in the amplitude and phase rotation amount estimator to said second estimation value, and the third estimation value so as to calculate a definite channel estimation value"

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is not found in the prior art.

Conclusion

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5. Prosecution on the merits is closed in accordance with the practice under *Ex* parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO**MONTHS from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CLD 7/19/2005 105

HUY D. VU UPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600